



RIO VERDE AREA DRAINAGE MASTER PLAN

Felicia Terry, P.E.

Project Manager

Flood Control District of Maricopa County



Area Photographs





Area Photographs





Area Photographs





West County Flooding





West County Flooding





Mission Statement

The mission of the Flood Control District of Maricopa County is to provide flood hazard identification, regulation, remediation, and education to the residents of Maricopa County, to reduce their risks of injury, death, and property damage due to flooding while allowing them to enjoy the natural and beneficial values provided by floodplains.



Area Drainage Master Plans (ADMP)

- ❑ **Provides flood control management recommendations that mitigate identified flood and erosion hazards.**
- ❑ **How is an ADMP Developed?**
 - Data Collection
 - Alternatives formulation and evaluation
 - Public Involvement
 - Recommended Alternative
- ❑ **Implementation Process**
 - Prioritize
 - Design/Construction
 - Funding



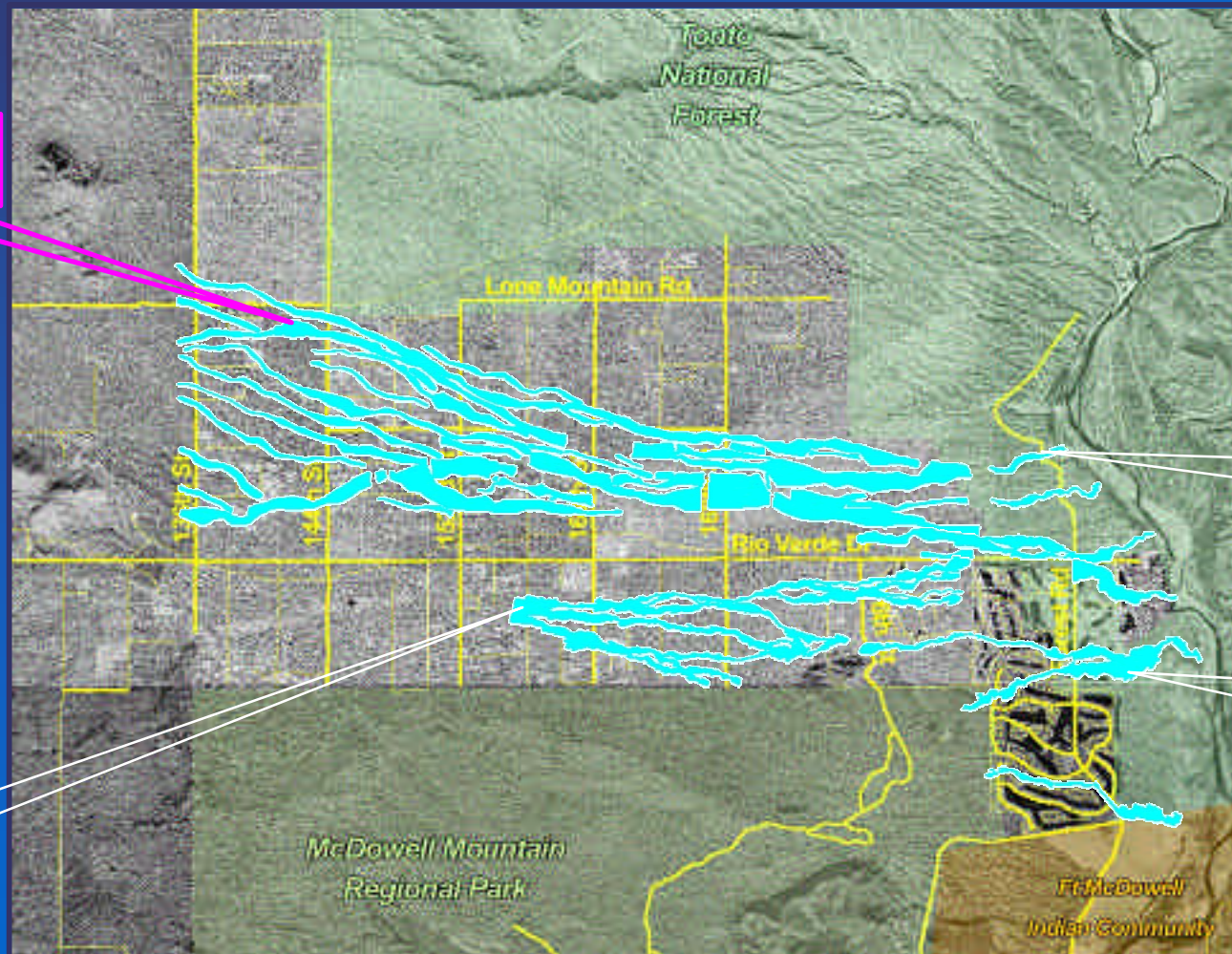
Project History

Rio Verde North
Extension

Rio Verde
North

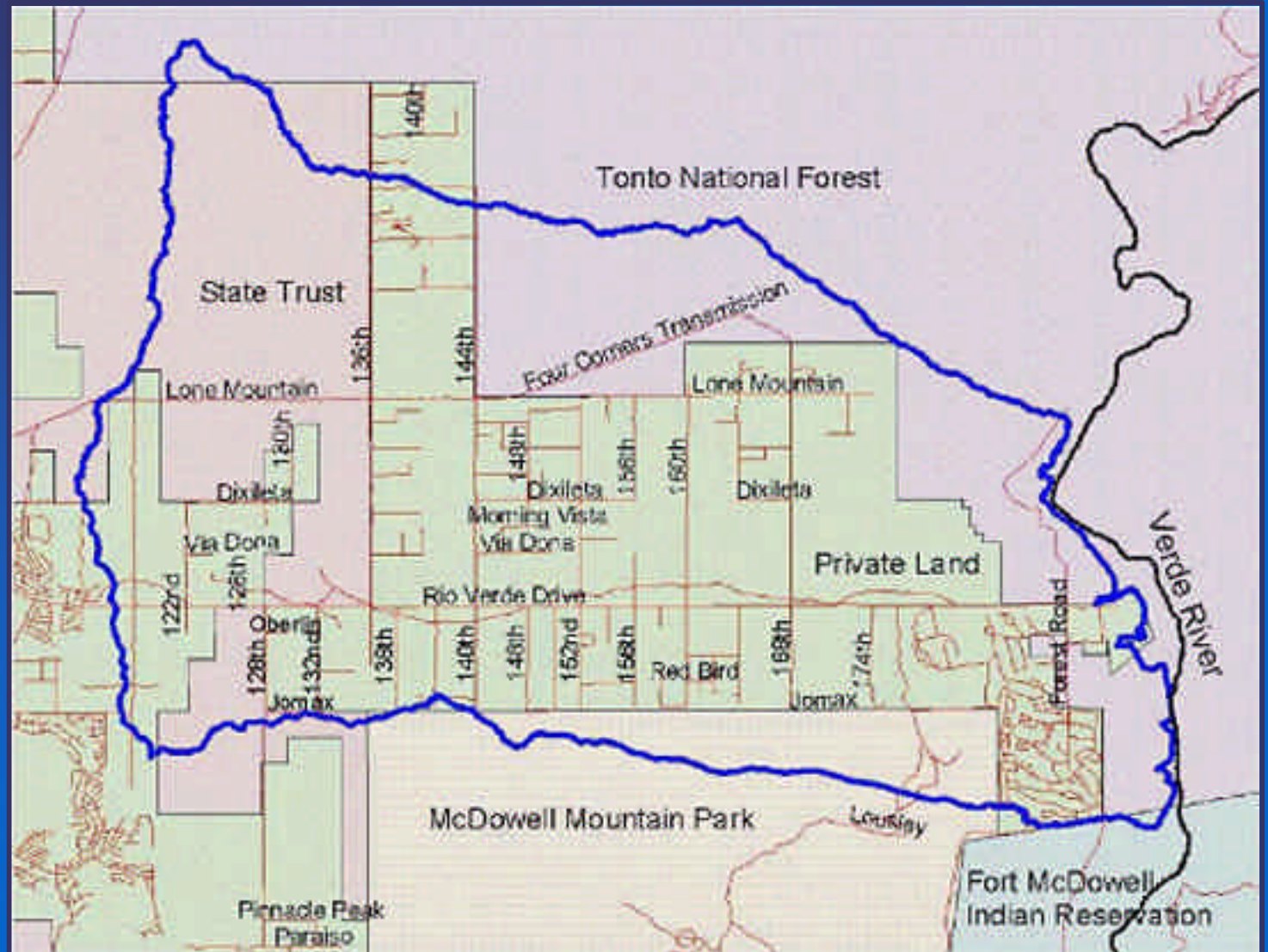
Rio Verde
South

Rio Verde South
Extension



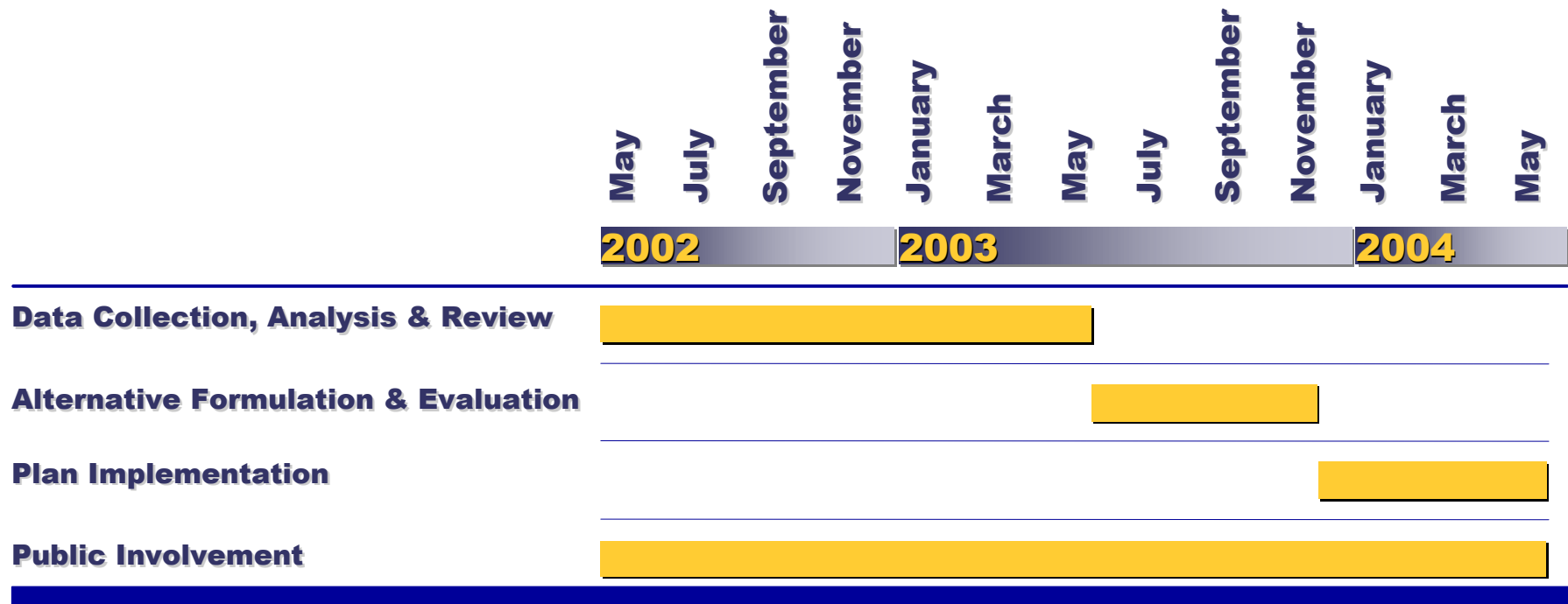


Rio Verde Study Area





Project Schedule





RIO VERDE FLOODING

Brian Fry, P.E.

Consultant Project Manager

Dibble & Associates



Rainfall

Approximate Rainfall Totals in inches for Rio Verde Area

Frequency	2-year	10-year	100-year
6-hour	1.6	2.3	3.4
24-hour	1.9	3.0	4.6

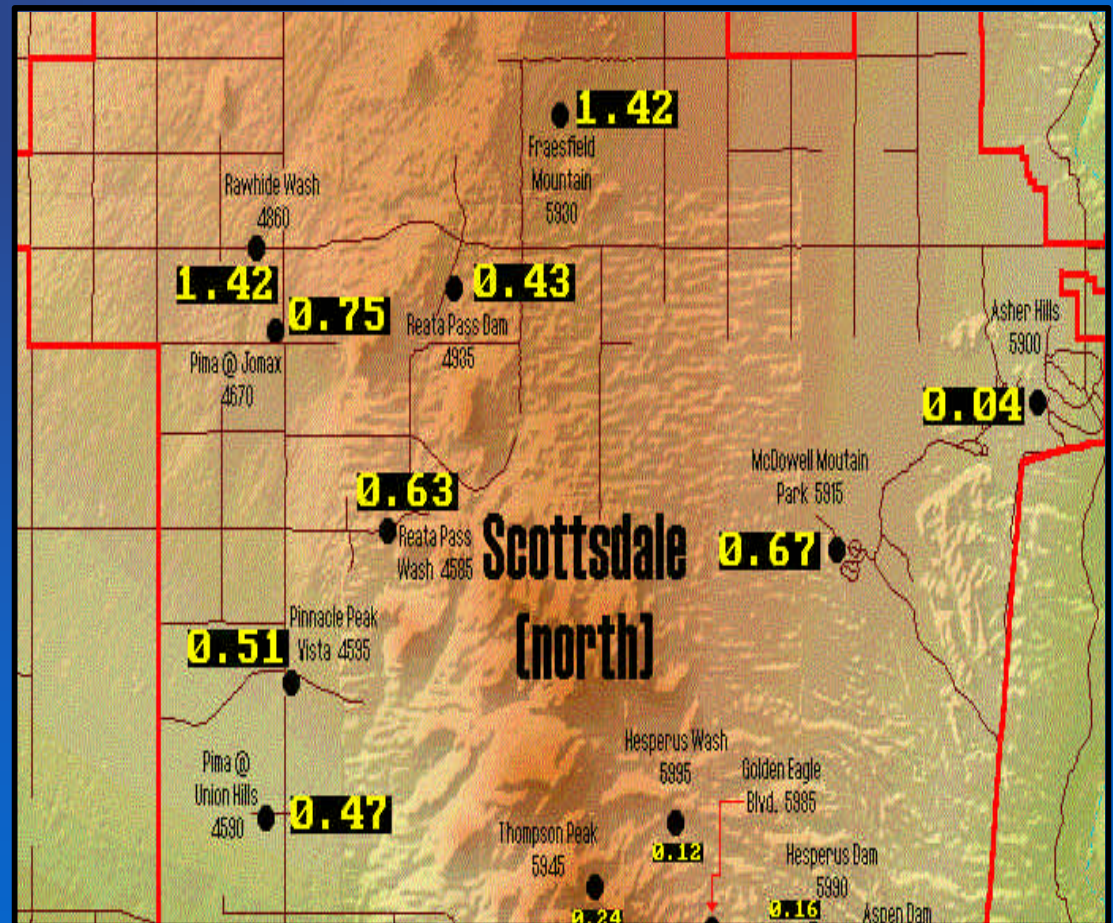
Values based on NOAA Atlas
100-year/24 hour National Standard: FEMA, NFIP



July 14 Rainfall (2-yr., 1-hr storm)

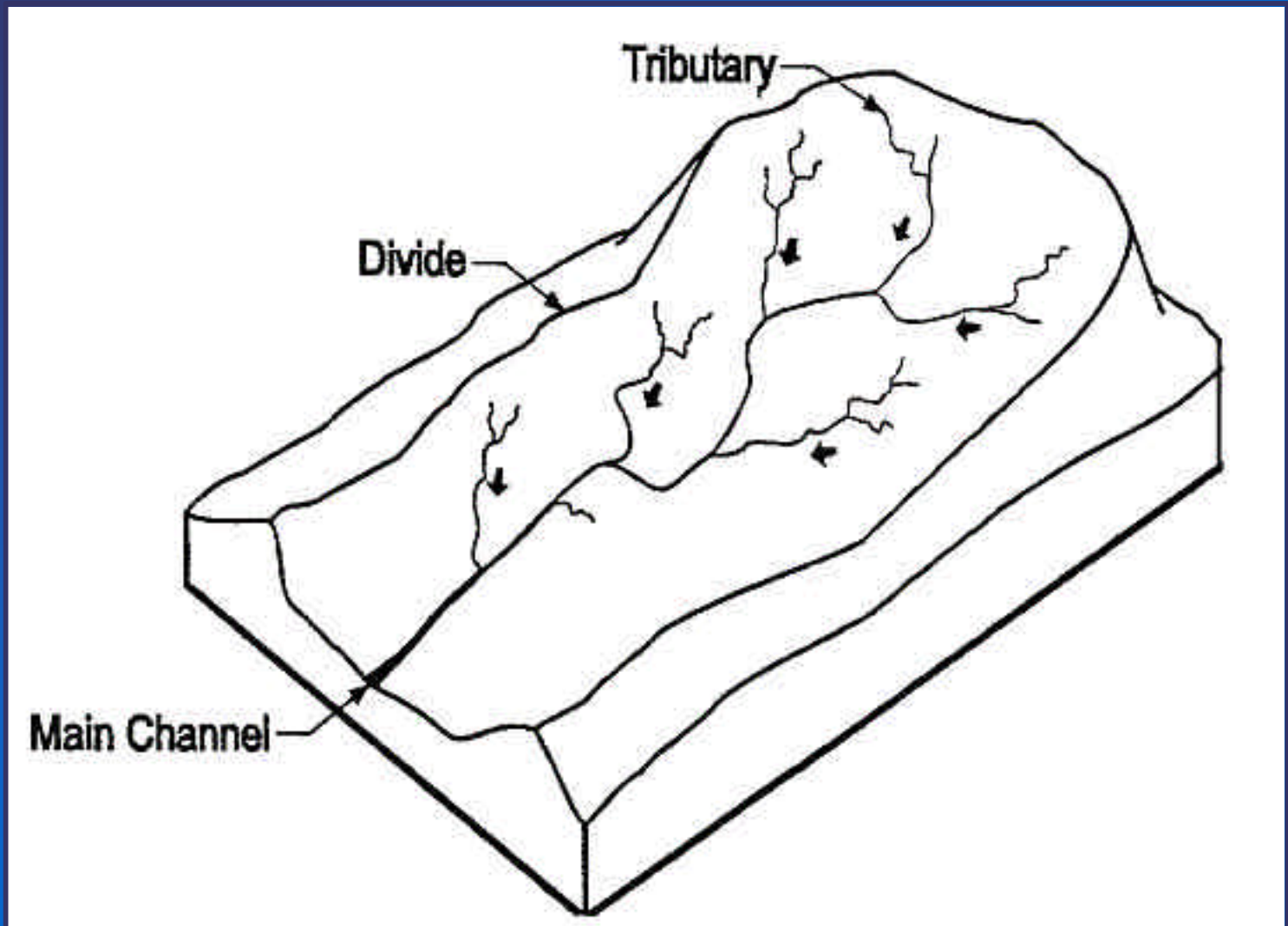
5930 Fraesfield Mountain Precipitation Gage

Date	Time	inches
07/15/2002	02:24:23	2.72
07/14/2002	21:14:16	2.64
07/14/2002	21:02:16	2.60
07/14/2002	20:48:45	2.52
07/14/2002	20:44:51	2.48
07/14/2002	20:41:37	2.44
07/14/2002	20:39:52	2.40
07/14/2002	20:37:42	2.32
07/14/2002	20:36:30	2.28
07/14/2002	20:25:52	2.24
07/14/2002	20:21:59	2.20
07/14/2002	20:19:41	2.17
07/14/2002	20:18:21	2.13
07/14/2002	20:17:16	2.09
07/14/2002	20:16:14	2.05
07/14/2002	20:14:27	2.01
07/14/2002	20:12:38	1.97
07/14/2002	20:11:33	1.93
07/14/2002	20:11:05	1.89
07/14/2002	20:10:10	1.85
07/14/2002	20:09:30	1.81
07/14/2002	20:09:00	1.77
07/14/2002	20:08:36	1.73
07/14/2002	20:07:35	1.65
07/14/2002	20:06:38	1.61
07/14/2002	20:05:42	1.57
07/14/2002	20:03:02	1.46
07/14/2002	20:02:18	1.42
07/14/2002	20:01:46	1.38



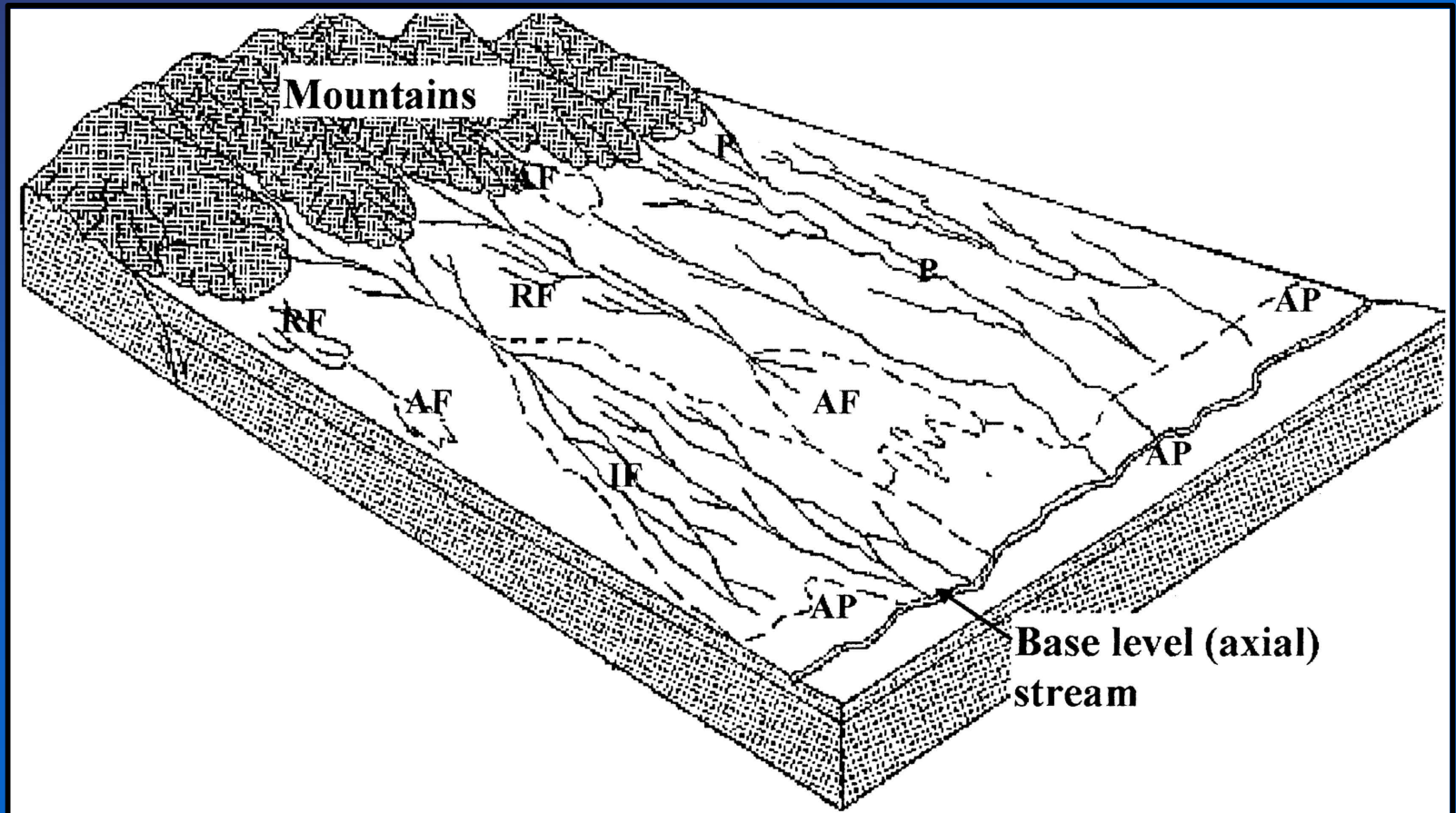


Tributary Drainage





Distributary Drainage





Unique Conditions in Rio Verde Area

- ❑ Steep Slopes
- ❑ Fine-grained Sediments
- ❑ Distributary Stream Networks
- ❑ Shallow Sheet Flooding
- ❑ Lateral Erosion & Gullying
- ❑ Natural Debris Diversions & Flow Splits



Management Tools

❑ **DEVELOPMENT GUIDELINES**

The intent of the Development Guidelines is to mitigate or minimize flooding impacts due to urbanization of a watershed.

❑ **STRUCTURAL ALTERNATIVES**

A structural alternative is the construction of flood control structures such as dams, concrete channels, levees, etc. to control flood waters of large rivers / washes.

❑ **FLOODPLAIN DELINEATIONS**

Floodplain delineations show the limits and sometimes the water surface elevation of areas that are susceptible to inundation by a base flood / 100-year flood / 1% annual chance flood.



PUBLIC INVOLVEMENT

Felicia Terry, P.E.

Project Manager

Flood Control District of Maricopa County



Public Involvement

Public invited to express ideas and insights. We invite you to get involved in the problem solving process and to create a community based solution.

- ❑ 3,000 Brochures and Surveys mailed to the community
- ❑ Public Meetings will be held throughout the project
- ❑ Project Website – www.fcd.maricopa.gov
- ❑ Advertising and Articles will continue in local media
- ❑ Work Group



Work Group Members

Shirl Anderson

Alan Burgess

Fred Fleet

Matt Holm

Richard Hollabaugh

Gary Lane

Bren Riesinger

John Shy

Bob Thomas

Susan Troen



Questions

Felicia Terry, P.E.

Project Manager

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